CLAIMS

1   1.   A speech recognition system comprising:

2   a querying device for posing at least one query to a respondent;

3   a speech recognition device which receives an audio response from said respondent

4 and transcribes said audio response to produce a corresponding text response; and

5   a storage device for storing said audio response as it is received by said speech

6 recognition device.

1   2.   The speech recognition system of claim 1 further comprising an accuracy

2 determination device for comparing said text response to a text set of expected responses and

3 determining whether said text response corresponds to one of said expected responses.

1   3.   The speech recognition system of claim 2 wherein, if said accuracy

2 determination device determines that said text response does not correspond to one of said

3 expected responses within a predetermined accuracy confidence parameter, said accuracy

4 determination device flags said audio response for further review.

1   4.   The speech recognition system of claim 3 further comprising a human

2 interface device for enabling a human operator to view said at least one query and to hear

3 said audio response that corresponds to said at least one query.

1   5.   The speech recognition system of claim 4 wherein said human interface device

2 comprises a personal computer including a monitor for enabling the operator to view said at

3 least one query and an audio speaker device for enabling the operator to listen to said audio

4 response.

1   6.   The speech recognition system of claim 4 wherein said querying device

2 includes a program having an application file, said application file including code which

3   causes the at least one query to be posed to the respondent, a list of expected responses and

4   an address at which a file containing the received audio response will be stored in the storage

5   device.

1   7.   The speech recognition system of claim 5 wherein said querying device

2   includes a program having an application file, said application file including code which

3   causes the at least one query to be posed to the respondent, a list of expected responses and

4   an address at which a file containing the received audio response will be stored in the storage

5   device.

1   8.   The speech recognition system of claim 4 wherein said human interface device

2   includes a graphical user interface on which the operator views said at least one query and

3   said text set of expected responses wherein, after listening to said audio response, the

4   operator is able to select one of said expected responses from said text set of expected

5   responses.

1   9.   The speech recognition system of claim 7 wherein said human interface device

2   includes a graphical user interface on which the operator views said at least one query and

3   said text set of expected responses wherein, after listening to said audio response, the

4   operator is able to select one of said expected responses from said text set of expected

5   responses.

1   10.   The speech recognition system of claim 7 wherein said graphical user

2   interface comprises an application navigation window for enabling the operator to navigate

3   through said at least one query, and an audio navigation window for enabling the operator to

4   control playback of said audio response.

1   11.   The speech recognition system of claim 9 wherein said graphical user

2   interface comprises an application navigation window for enabling the operator to navigate

3   through said at least one query, and an audio navigation window for enabling the operator to

4   control playback of said audio response.

1   12.   The speech recognition system of claim 7 wherein said graphical user

2   interface includes a text entry window which enables the operator to enter a text response if

3   none of said expected responses from said text set of expected responses corresponds to said

4   audio response.

1   13.   The speech recognition system of claim 11 wherein said graphical user

2   interface includes a text entry window which enables the operator to enter a text response if

3   none of said expected responses from said text set of expected responses corresponds to said

4   audio response.

1   14.   A speech recognition system comprising:

2   a querying device for posing at least one query to a respondent;

3   a speech recognition device which receives an audio response from said respondent

4   and transcribes said audio response to produce a corresponding text response;

5   a storage device for storing said audio response as it is received by said speech

6   recognition device; and

7   an accuracy determination device for comparing said text response to a text set of

8   expected responses and determining whether said text response corresponds to one of said

9   expected responses.

1   15.   The speech recognition system of claim 14 wherein, if said accuracy

2   determination device determines that said text response does not correspond to one of said

3   expected responses within a predetermined accuracy confidence parameter, said accuracy

4   determination device flags said audio response for further review.

1   16.   The speech recognition system of claim 15 further comprising a human

2   interface device for enabling a human operator to view said at least one query and to hear

3   said audio response that corresponds to said at least one query.

1   17.   The speech recognition system of claim 16 wherein said human interface

2   device comprises a personal computer including a monitor for enabling the operator to view

3   said at least one query and an audio speaker device for enabling the operator to listen to said

4   audio response.

1   18.   The speech recognition system of claim 16 wherein said querying device

2   includes a program having an application file, said application file including code which

3   causes the at least one query to be posed to the respondent, a list of expected responses and

4   an address at which a file containing the received audio response will be stored in the storage

5   device.

1   19.   The speech recognition system of claim 17 wherein said querying device

2   includes a program having an application file, said application file including code which

3   causes the at least one query to be posed to the respondent, a list of expected responses and

4   an address at which a file containing the received audio response will be stored in the storage

5   device.

1   20.   The speech recognition system of claim 16 wherein said human interface

2   device includes a graphical user interface on which the operator views said at least one query

3   and said text set of expected responses wherein, after listening to said audio response, the

4   operator is able to select one of said expected responses from said text set of expected

5   responses.

1   21.   The speech recognition system of claim 19 wherein said human interface

2   device includes a graphical user interface on which the operator views said at least one query

3   and said text set of expected responses wherein, after listening to said audio response, the

4   operator is able to select one of said expected responses from said text set of expected

5   responses.

1   22.   The speech recognition system of claim 19 wherein said graphical user

2   interface comprises an application navigation window for enabling the operator to navigate

3   through said at least one query, and an audio navigation window for enabling the operator to

4   control playback of said audio response.

1   23.   The speech recognition system of claim 21 wherein said graphical user

2   interface comprises an application navigation window for enabling the operator to navigate

3   through said at least one query, and an audio navigation window for enabling the operator to

4   control playback of said audio response.

1   24.   The speech recognition system of claim 19 wherein said graphical user

2   interface includes a text entry window which enables the operator to enter a text response if

3   none of said expected responses from said text set of expected responses corresponds to said

4   audio response.

1   25.   The speech recognition system of claim 23 wherein said graphical user

2   interface includes a text entry window which enables the operator to enter a text response if

3   none of said expected responses from said text set of expected responses corresponds to said

4   audio response.

1   26.   A method for transcribing an audio response comprising:

2   A. posing a query to a respondent;

3   B. receiving an audio response from said respondent;

4   C. performing a speech recognition function on said audio response to transcribe said

5 audio response to a textual response;

6   D. recording said audio response;

7   E. comparing said textual response to a set of expected responses to said query, said

8 set including a plurality of expected responses to said query in a textual form; and

9   F. flagging said audio response if the corresponding textual response does not

10 correspond to one of said expected responses in said set of expected responses.

11   27.   The method of claim 26 further comprising;

12   G. listening to said audio response; and

13   H. selecting, from said set of expected responses, a textual response that corresponds

14 to said audio response.

1   28.   The method of claim 26 further comprising:

2   G. listening to said audio response; and

3   H. manually transcribing a textual response that corresponds to said audio response.

1   29.   A method for transcribing an audio response comprising:

2   A. constructing a speech recognition application including a plurality of queries and a

3 set of expected responses for each query, said set including a plurality of expected responses

4 to each query in a textual form;

5   B. posing each of said queries to a respondent;

6   C. receiving an audio response to each query from said respondent;

7   D. performing a speech recognition function on each said audio response to

8   transcribe each said audio response to a textual response to each query;

9   E. recording each audio response; and

10   F. comparing each textual response to said set of expected responses for each

11   corresponding query to determine if each textual response corresponds to any of said

12   expected responses in said set of expected responses for the corresponding query.

1   30.   The method of claim 29 further comprising:

2   G. flagging each audio response corresponding to a textual response that does not

3   correspond to one of said expected responses in said set of expected responses to the

4   corresponding query.

1   31.   The method of claim 30 further comprising:

2   H. reviewing each flagged audio response to determine if a corresponding expected

3   response is included in said set of expected responses for the query associated with each

4   audio response.

1   32.   The method of claim 31 further comprising selecting, from an associated set of

2   expected responses for each query, a response that corresponds to said flagged audio

3   response.

1   33.   The method of claim 31 further comprising manually transcribing a response

2   that corresponds to each flagged audio response.

1   34.   A method for transcribing an audio response comprising:

2   A. constructing a speech recognition application including a plurality of queries and a

3   set of expected responses for each query, said set including a plurality of expected responses

4   to each query in a textual form;

5   B. posing each of said queries to a respondent with a querying device;

6   C. receiving an audio response to each query from said respondent;

7   D. performing a speech recognition function on each said audio response with an

8 automatic speech recognition device to transcribe each said audio response to a textual

9 response to each query;

10   E. recording each audio response with a recording device; and

11   F. comparing, with said automatic speech recognition device, each textual response

12 to said set of expected responses for each corresponding query to determine if each textual

13 response corresponds to any of said expected responses in said set of expected responses for

14 the corresponding query.

      35.   The method of claim 34 further comprising:

          G. flagging each audio response corresponding to a textual response that does not

correspond to one of said expected responses in said set of expected responses to the

corresponding query.

      36.   The method of claim 35 further comprising:

          H. reviewing each flagged audio response with a human interface device to determine

3 if a corresponding textual response is included in said set of expected responses for the query

4 associated with each audio response.